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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,213	10/20/2003	Nancy L. Saxon	60130-1770; 00MRA0427	4086

26096 7590 07/13/2005

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EXAMINER

GIBSON, RANDY W

ART UNIT PAPER NUMBER

2841

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/689,213	SAXON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Randy W. Gibson	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 2-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2</u> .   | 6) <input type="checkbox"/> Other: ____                                     |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claim 1 is allowable over the prior art of record. None of the art of record suggests, *inter alia*, having the evaluation unit calculate the optimum distance between a kingpin and an axle in context of the claimed vehicle system.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamilton et al (U.S. # 4,651,838). Hamilton et al discloses the claimed invention including at least one load sensor (65), a memory unit (74) for storing load optimization data (Col. 8, lines 25-35), and a position sensor (120) for determining the position of an axle component of the vehicle for optimizing vehicle loading (Col. 8, lines 25-40, & Col. 12, lines 3-68), and calculating the center of gravity of the vehicle (Col. 8, lines 12-24). As for the limitation of the vehicle axle including a “slider”, applicant has already admitted that these are known in the art (paragraph 0037).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12-16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson (U.S. # 5, 167,289) in view of Hamilton et al (U.S. # 4,651,838). As acknowledged by the applicant in his reply brief, the only difference between the apparatus disclosed by Stevenson and the claimed invention is the use of position sensors. However, Hamilton et al teach that it is preferable to use position sensors in connection with weight detecting pressure sensors to insure that the vehicle is level and that the air bag suspension is properly inflated before taking pressure readings (Col. 12, lines 3-68). It would have been obvious to the ordinary practitioner to modify the apparatus of Stevenson to include position sensors, as taught by Hamilton et al, to insure that the vehicle was in a condition to insure that accurate weight readings could be taken. As for the limitation of the vehicle axle including a "tandem slider", applicant has already admitted that these are known in the art (paragraph 0037). Note that Hamilton teaches calculating the center of gravity of the vehicle (Col. 8, lines 12-24) and would have been an obvious addition to Stevenson in order to warn the operator about potential vehicle instability.

6. Claims 12-16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kyrtos (U.S. # 6,363,331 B1) in view of Hamilton et al (U.S. # 4,651,838). Kyrtos discloses an air suspension pressure weight sensor (Col. 2, lines 35-48), a memory unit for storing load optimization data (Col. 2, lines 49-57; Col. 3, lines 36-57). As acknowledged by the applicant in his reply brief, the only difference between apparatus disclosed by Kyrtos and the claimed invention is the use of position sensors. However, Hamilton et al teach that it is preferable to use position sensors in connection with weight detecting pressure sensors to insure that the vehicle is level and that the air bag suspension is properly inflated before taking pressure readings (Col. 12, lines 3-68). It would have been obvious to the ordinary practitioner to modify the apparatus of Kyrtos to include position sensors, as taught by Hamilton et al, to insure that the vehicle was in a condition to insure that accurate weight readings could be taken. As for the limitation of the vehicle axle including a "tandem slider", applicant has already admitted that these are known in the art (paragraph 0037). Note that Hamilton teaches calculating the center of gravity of the vehicle (Col. 8, lines 12-24) and would have been an obvious addition to Kyrtos in order to warn the operator about potential vehicle instability.

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton et al (U.S. # 4,651,838) in view of Wagner (U.S. # 4,854,407), Schmidt (U.S. 4,103,752), Breed et al (U.S. # 6,242,701 B1), and Schedrat et al (U.S. #

5,526,702). As discussed above, Hamilton et al discloses the claimed invention except for the position sensor for determining the position of the kingpin assembly. However, it is known in the art that movement of the kingpin assembly requires readjustment of the calibration of the pressure weight sensors since movement of the same shifts the weight being supported among the various axles of the vehicle as shown by the examples of Wagner (Abs.; Col. 3, lines 59-68) and Schmidt (Col. 6, lines 40-51). Wagner and Schmidt both require manual readjustment, or recalibration, of the weight display device in response to the movement of the kingpin assembly. It is known in the art to use a linear variable resistor to automatically measure linear displacement of a rack assembly to allow automatic readjustment of a vehicle mounted weighing device as shown by the example of Breed et al (Col. 13, lines 22-61 and Col. 15, ln. 63 to col. 16, ln. 16). Since Schedrat et al suggest using position sensors in association with vehicle kingpin assemblies (Col. 2, lines 37-48), it would have been obvious to the ordinary practitioner to use a position sensor in connection with the kingpin assembly of Hamilton et al to allow the weight display device to automatically readjust for movement of the kingpin assembly without the operator having to remember to manually readjust the display device every time he moves the kingpin assembly.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson (U.S. # 5,167,289) in view of Hamilton et al (U.S. # 4,651,838) as applied to claims 12-16 and 20 above, and further in view of Wagner (U.S. # 4,854,407), Schmidt (U.S. 4,103,752), Breed et al (U.S. # 6,242,701 B1), and Schedrat et al (U.S. #

5,526,702). As discussed above, the combination of Stevenson and Hamilton et al disclose the claimed invention except for the position sensor for determining the position of the kingpin assembly. However, it is known in the art that movement of the kingpin assembly requires readjustment of the calibration of the pressure weight sensors since movement of the same shifts the weight being supported among the various axles of the vehicle as shown by the examples of Wagner (Abs.; Col. 3, lines 59-68) and Schmidt (Col. 6, lines 40-51). Wagner and Schmidt both require manual readjustment, or recalibration, of the weight display device in response to the movement of the kingpin assembly. It is known in the art to use a linear variable resistor to automatically measure linear displacement of a rack assembly to allow automatic readjustment of a vehicle mounted weighing device as shown by the example of Breed et al (Col. 13, lines 22-61 and Col. 15, ln. 63 to col. 16, ln. 16). Since Schedrat et al suggest using position sensors in association with vehicle kingpin assemblies (Col. 2, lines 37-48), it would have been obvious to the ordinary practitioner to use a position sensor in connection with the kingpin assembly of Stevenson to allow the weight display device to automatically readjust for movement of the kingpin assembly without the operator having to remember to manually readjust the display device every time he moves the kingpin assembly.

9. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kyrtos (U.S. # 6,363,331 B1) in view of Hamilton et al (U.S. # 4,651,838) as applied to claims 12-16 and 20 above, and further in view of Wagner (U.S. # 4,854,407), Schmidt (U.S. # 4,103,752), Breed et al (U.S. # 6,242,701 B1), and Schedrat et al (U.S.

# 5,526,702). As discussed above, the combination of Kyrtos and Hamilton et al disclose the claimed invention except for the position sensor for determining the position of the kingpin assembly. However, it is known in the art that movement of the kingpin assembly requires readjustment of the calibration of the pressure weight sensors since movement of the same shifts the weight being supported among the various axles of the vehicle as shown by the examples of Wagner (Abs.; Col. 3, lines 59-68) and Schmidt (Col. 6, lines 40-51). Wagner and Schmidt both require manual readjustment, or recalibration, of the weight display device in response to the movement of the kingpin assembly. It is known in the art to use a linear variable resistor to automatically measure linear displacement of a rack assembly to allow automatic readjustment of a vehicle mounted weighing device as shown by the example of Breed et al (Col. 13, lines 22-61 and Col. 15, ln. 63 to col. 16, ln. 16). Since Schedrat et al suggest using position sensors in association with vehicle kingpin assemblies (Col. 2, lines 37-48), it would have been obvious to the ordinary practitioner to use a position sensor in connection with the kingpin assembly of Kyrtos to allow the weight display device to automatically readjust for movement of the kingpin assembly without the operator having to remember to manually readjust the display device every time he moves the kingpin assembly.

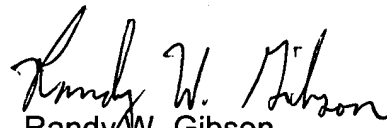


**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy W. Gibson whose telephone number is (571) 272-2103. The examiner can normally be reached on Mon-Fri., 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Randy W. Gibson  
Primary Examiner  
Art Unit 2841